

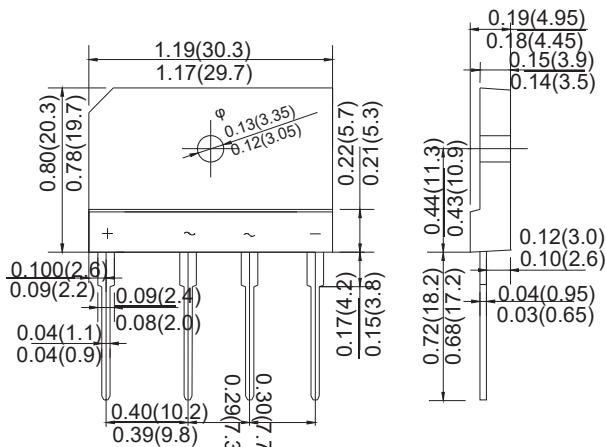
## KBJ SILICON BRIDGE RECTIFIERV

### FEATURES

- The plastic package carries Underwriters Laboratory Flammability Classification 94V-0
- Construction utilizes void-free molded plastic technique
- High reliability
- High temperature soldering guaranteed: 260 °C/10 seconds at terminals
- Component in accordance to RoHS 2015/863 and WEEE 2012/19/EU

### MECHANICAL DATA

- Case style: KBJ molded plastic
- Mounting position: Any



### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.

Single phase, half wave, 60 Hz, resistive or inductive load. For capacitive load, derate by 20%.

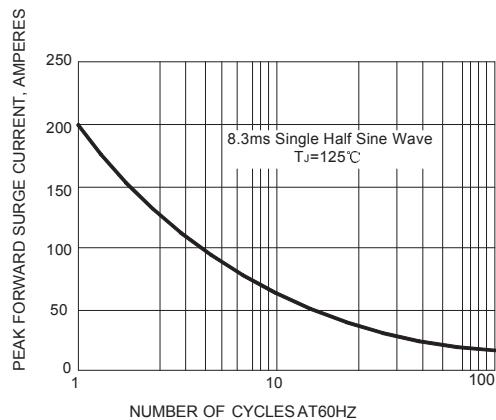
		KBJ 10A	KBJ 10B	KBJ 10D	KBJ 10G	KBJ 10J	KBJ 10K	KBJ 10M	UNITS
Maximum recurrent peak reverse voltage	$V_{RRM}$	50	100	200	400	600	800	1000	V
Maximum RMS voltage	$V_{RMS}$	35	70	140	280	420	560	700	V
Maximum DC blocking voltage	$V_{DC}$	50	100	200	400	600	800	1000	V
Maximum average forward Output current @ $T_A = 110^\circ\text{C}$	$I_{F(AV)}$				10.0				A
Peak forward surge current 8.3ms single half-sine-wave superimposed on rated load	$I_{FSM}$				200.0				A
Maximum instantaneous forward voltage at 5.0 A	$V_F$				1.1				V
Maximum reverse current @ $T_A = 25^\circ\text{C}$ at rated DC blocking voltage @ $T_A = 100^\circ\text{C}$	$I_R$				5.0				$\mu\text{A}$
Typical junction capacitance per element	$C_J$				0.5				mA
Typical thermal resistance	$R_{\theta JC}$				55				pF
Operating junction temperature range	$T_J$				- 55 ---- + 150				°C/W
Storage temperature range	$T_{STG}$				- 55 ---- + 150				°C

NOTES: 1. Measured at 1.0MHz and applied reverse voltage of 4.0V DC

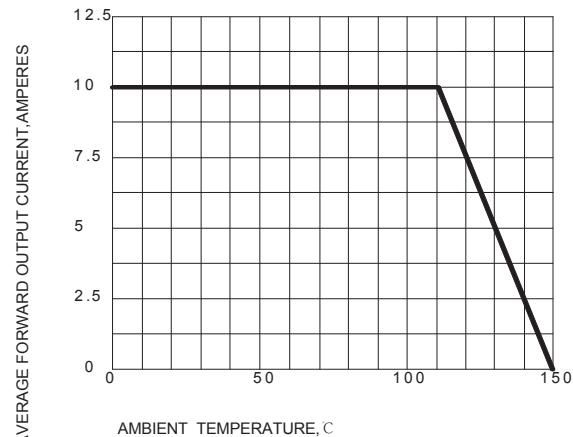
2. Device mounted on 300mm X 300mm X 1.6mm cu Plate heatsink.

## RATINGS AND CHARACTERISTIC CURVES

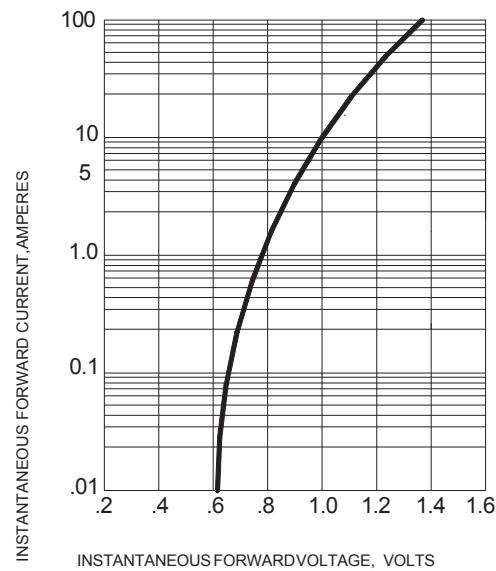
**FIG.1 – PEAK FORWARD SURGE CURRENT**



**FIG.2 – FORWARD DERATING CURVE**



**FIG.3 -- TYPICAL FORWARD CHARACTERISTIC**



**FIG.4 -- TYPICAL JUNCTION CAPACITANCE**

